



students of genetics in general and can recommend consideration of the book for inclusion in human genetic departmental libraries, among others.

Unfortunately I cannot be more enthusiastic than that about the book, but I hasten to add that this in no way reflects on the authors. Rather, advances in molecular genetics have been so explosive over the past several years that it would be almost impossible for a book like this to remain current for more than a 6-mo interval. More important, it is clear that the book is not primarily intended for specialists in human genetics, particularly clinical practitioners of the field, such as myself. Indeed, I apologize for having to review this matter with such tunnel vision. However, it is a fact that what I wanted to see and did not find were illustrations from the "book of life" giving insights into basic genetic concepts.

Again, to be fair, most of these medical illustrations were discovered after the book's publication. For example, under the heading "gene amplification" there is no mention of the CTG repeats in myotonic dystrophy or of the CGG repeats in fragile X syndrome. Under "Y chromosome" there is the following: "In mammals, a DNA sequence encoding a  $\rightarrow$ zinc finger protein resides in the region of the Y c. that causes male development (a gene for testis determination)" (p. 506), but there is no mention of SRY. Under the headings "genetic imprinting" and "disomic" there is no mention of molar pregnancies, ovarian teratomas, or Prader-Willi or Angelman syndromes. Finally, the treatment of the concept of "dosage compensation" is simply archaic.

I think the concept of a glossary such as this is a very good idea. I know that many times I have come across terms of classical or molecular genetics that, if I ever knew, I have long since forgotten. But in order for such a book to secure a place in my limited personal library, it would have to be thoroughly revised, including yearly updates (by computer?), and made more immediately relevant to the field of medical genetics.

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*The Child Who Never Grew.* By Pearl S. Buck. Rockville, MD: Woodbine, 1992. Pp. 107. \$14.95.

This is a story of the early years of the life of a child retarded because of a phenylketonuria (PKU) disorder, as told by her mother, Pearl Buck, also a famous writer and winner of both the Nobel and Pulitzer prizes.

It was written 30 years after the birth of her daughter Carol, when Pearl Buck was age 58 years, and was first published in 1950. It is felt by some to be her most influential work. Now, 20 years after Pearl Buck's death, it is republished by Woodbine House and is accompanied by contributions from James Michener, Buck's neighbor, and Martha Jablow, also an author and mother of a retarded daughter. An afterword is included, by Janice C. Walsh, Carol Buck's sister and legal guardian.

These additional authors complement Pearl Buck's story by adding to our knowledge of Buck as a tireless worker for the handicapped, letting us know the milestones in the history of mental retardation, and finally, showing us Pearl and Carol Buck through the eyes of one of the author's adopted children.

By telling this story, Pearl Buck was one of the first to bring retardation into the open, and the story contributed much to the education of the public on a topic that was not generally discussed. It is not an easy task to tell of the struggle of recognizing your child as abnormal, the search for a diagnosis or therapy, if it is available, and finally, the separation of parent and child when the child is placed in a home whose purpose was to improve the world for the handicapped. She stressed that, with effort, there could be improvement in their care and that, perhaps, an early diagnosis could prevent a handicap. How right she was, as the PKU disorder was the first genetic disease to be treated by nutritional means . . . sadly, not soon enough to prevent Carol's retardation. Pearl Buck stressed the importance of research in retardation, and still today, workers in the study of PKU disorder strive for improved therapy. Pearl Buck also describes how we can better understand normal development by studying the abnormalities of the handicapped. She uses as an illustration the Vineland social maturity scale, for the purpose of evaluating normal individuals, that was developed in the institution where Carol was living. This is a story built on hope, but the reader will recognize the sadness that prevented Pearl Buck from ever mentioning Carol's name in the story, as she tells of her struggles to accept bad news and to continue to work toward better times.

James Michener's foreword tells us of Pearl Buck's other efforts that established Welcome House to provide American homes for the abandoned children of Asian mothers and American GI fathers. Pearl Buck never wanted these abandoned children to be placed in orphanages. Again we see how good results can be produced by energy derived from experiences with the disadvantaged.

Martha Jablow gives a fine overview of the history of retardation, which places Pearl Buck's story in the context of what happened before the time Carol was born and what has taken place up to the present. Finally, in the afterword, we learn of Pearl Buck, as a mother to her seven adopted children, and of Carol, up to her death at age 72 years at Vineland, NJ, on September 30, 1972.

All in all, this is powerful reading that will benefit a wide audience. Our hats are off to Woodbine House for assem-



bling the various portions of this slim volume in the 20th year since the death of Pearl Buck.

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*Towards a Healthy Baby: Congenital Disorders and the New Genetics in Primary Health Care.* By Bernadette Modell and Michael Modell. Oxford: Oxford University Press, 1992. Pp. 411. \$95.00 (cloth); \$49.95 (paper).

This book is intended primarily for doctors, nurses, and counselors working in primary care in the United Kingdom and the rest of Europe. The stated objectives are to summarize recent advances in the understanding of congenital and genetic disorders and to discuss their relevance to the care of people in the community. This volume succeeds admirably in reaching this rather ambitious objective. It may also be of interest to medical, nursing, and medical genetic counseling students. Because the information presented is generally clear and up-to-date, it could even be useful to those preparing for board examination in medical genetics. The reader in the United States, however, needs to be aware that the book is written from a British perspective and that, in the United Kingdom, the general approach to medical care, the frequency of certain genetic conditions, and the approach to social and ethical issues all may differ somewhat from those current in the United States.

The text begins with an excellent overview of basic genetics, which would be especially useful to the reader whose initial genetics training was many years ago. Unusual and interesting aspects of this overview include a discussion of evolution, which is worked into the text rather than being a separate section. There is also an excellent section on cancer as an acquired genetic disease.

The next section, entitled "Genetic Diagnosis and Counseling," is somewhat difficult to follow in its organization. In addition to basic topics such as construction of a pedigree and a general approach to simple counseling (e.g., that done prior to screening for a genetic disorder), this section also contains some interesting social and ethical commentaries. One particularly interesting chapter deals with consanguineous marriage. Although standard risk figures regarding the increased incidence of autosomal recessive and multifactorial disorders are used, the emphasis in this chapter is designed to counteract prejudice against consanguineous unions. Possible benefits to the population by a decrease of

abnormal genes in the gene pool, as well as social benefits in some cultures, are discussed. These benefits include not only the removal of some detrimental genes from the gene pool, but also social benefits, since a consanguineous marriage offers a woman some protection against blame for genetic conditions in the family. There is also a good introduction to new genetic methods including DNA diagnosis, as well as gene therapy, transplantation, genetic engineering, fetal therapy, and preimplantation diagnosis. Prenatal diagnosis is emphasized; there is also a fairly extensive discussion of the role of ultrasound in prenatal diagnosis. Routine ultrasound is somewhat more common in the United Kingdom than in the United States, and level II and III ultrasound studies are also available as indicated. Chorionic villus sampling is also apparently quite widely available in the United Kingdom and often is preferred to amniocentesis, because of the earlier results. There is an excellent section on screening, which places genetic screening in its appropriate context, that is, as one of many screening methods that are used to determine when people should have additional studies.

The third section concerns specific relatively common genetic disorders. The chapter on hemoglobinopathies is longer and more detailed than is found in most U.S. texts, presumably because the mixture of immigrants in the United Kingdom results in a wide variety of hemoglobinopathies. Other common recessive disorders discussed here include alpha-1-antitrypsin deficiency, hemochromatosis, cystic fibrosis, and lactose intolerance. Common dominant conditions mentioned in the text include Huntington disease, adult polycystic kidney disease, achondroplasia, and familial hypercholesterolemia. The sex-linked disorders described include hemophilia, Duchenne muscular dystrophy, G6PD deficiency, and fragile X. The section on chronic malformations includes multifactorial conditions such as spina bifida, as well as chromosomal disorders such as Down syndrome and Klinefelter syndrome. The discussion of Down syndrome is somewhat discouraging in that the average performance of young adults in the United Kingdom who have Down syndrome seems to be more limited than that in the United States. This may reflect differences in early intervention or in residential versus home care. There is a brief discussion of the impact on the family of having a child with a severe malformation or chronic disorder. The decision to treat or not treat in the case of a severely affected newborn seems to be somewhat less confusing than it is in the United States, although there is mention of the conflicts that can arise if the parents are undecided or if the two parents disagree. The consensus seems to be that the parents should decide, but if they are undecided, the medical team may make the final decision, and if the parents disagree, then the mother's opinion should be given more weight.

The fourth section, entitled "Healthy Pregnancy," includes discussion of common teratogens, miscarriage, and routine screening during pregnancy (maternal serum alpha-fetoprotein, TORCH infections, and maternal age). The effect of maternal age on the risk of miscarriage is emphasized more